

MAML3 (T-18): sc-82223

BACKGROUND

MAML3 (Mastermind-like protein 3) is a nuclear speckle protein that acts as a transcriptional coactivator for Notch receptors. The Notch signaling pathway influences cell fate by regulating the ability of precursor cells to properly respond to developmental signals. MAML3 is a member of the mastermind-like family of proteins that are human homologs of the *Drosophila melanogaster* mastermind protein. Through its N-terminal region, MAML3 interacts with the ankyrin repeats of the Notch proteins Notch 1, Notch 2, Notch 3 and Notch 4. This interaction leads to formation of a DNA-binding complex with the Notch proteins and RBP-J κ ; a complex that can then induce HES1 gene expression. While the N-terminal domain of MAML3 is essential for proper Notch binding, the C-terminal domain of MAML3 is essential for transcriptional activation. Due to its involvement in cell signaling and transcriptional activation, up-regulation of MAML3 is thought to be involved in oncogenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MAML3 (human) mapping to 4q31.1; Maml3 (mouse) mapping to 3 C.

SOURCE

MAML3 (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAML3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82223 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-82223 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MAML3 (T-18) is recommended for detection of MAML3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family member MAML2.

MAML3 (T-18) is also recommended for detection of MAML3 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for MAML3 siRNA (h): sc-75744, MAML3 siRNA (m): sc-75745, MAML3 shRNA Plasmid (h): sc-75744-SH, MAML3 shRNA Plasmid (m): sc-75745-SH, MAML3 shRNA (h) Lentiviral Particles: sc-75744-V and MAML3 shRNA (m) Lentiviral Particles: sc-75745-V.

MAML3 (T-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of unprocessed MAML3 precursor: 150 kDa.

Molecular Weight of posttranslationally modified MAML3: 170 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.


 MONOS
 Satisfaction
 Guaranteed

Try **MAML3 (797C2a): sc-81104**, our highly recommended monoclonal alternative to MAML3 (T-18).